

AMENDMENTS TO THE CLAIMS

The following claim set replaces all prior versions, and listings, of claims in the application:

1. (currently amended) A method of treating pulp such as i.e. fiber suspensions of the paper and wood processing industry, ~~by which~~ said method comprising the steps of:

introducing a low consistency pulp ~~is taken~~ into a pre-thickener apparatus
having a filter surface and a cleaning member,

removing liquid ~~is removed~~ from the pulp in said pre-thickener apparatus
essentially by means of the effect of the feeding pressure of the
pre-thickener apparatus,

allowing a layer of thickened pulp ~~is allowed~~ to be formed on the filter
surface of the pre-thickener apparatus,

wiping said layer of thickened pulp ~~is wiped~~ off the filter surface of said
pre-thickener apparatus with a the cleaning member, and

discharging the thickened pulp and the filtrate ~~are discharged~~ from said
pre-thickener apparatus, and wherein said method further
comprises the steps of: characterized in that

pushing the layer of thickened pulp ~~is pushed~~ by said cleaning member
along said filter surface to the discharge end of the pre-thickener
apparatus in essentially an axial direction, while simultaneously
allowing at the same time the essentially non-thickened pulp ~~is allowed~~ to
flow through the apparatus from the feeding end to the discharge
end via the space between said cleaning member and ~~the~~ a shaft of
the apparatus, and

guiding a part of said essentially non-thickened pulp flow is guided to a portion of the filter surface portion being wiped by the cleaning member.

2. (currently amended) A method according to claim 1, comprising supplying ~~characterized in that~~ pulp is ~~taken into~~ to said pre-thickener apparatus from a screen, the screening consistency of which is about 2 – 4 %.

3. (currently amended) A method according to claim 1, wherein ~~characterized in that~~ the pulp thickened by the pre-thickener apparatus is taken into a filter, the feeding consistency of which is 3 – 6 %.

4. (currently amended) A method according to claim 2, ~~characterized in that~~ wherein between the screen and the filter the consistency of the pulp is raised by said pre-thickener by 1 – 4 %.

5. (currently amended) A method according to claim 1, ~~characterized in that~~ comprising rotating the rotational speed of said cleaning member at a rotational speed sufficient is such as to create a flow speed for the thickened layer of pulp ~~a speed of~~ less than 3 m/s towards the discharge end of the pre-thickener apparatus.

6. (currently amended) A method according to claim 5, ~~characterized in that~~ wherein said flow speed of the thickened layer of pulp is between 0.2-1.0 m/s, preferably about 0.5 m/s.

7. (currently amended) A method according to claim 1, ~~characterized in that~~ wherein the cleaning member comprises a rotatable screw, and wherein the feeding speed of the screw and the flow speed of the non-thickened pulp are essentially the same at the discharge end of the apparatus.

8. (currently amended) A method according to claim 1, further comprising using a pump so as to create ~~characterized in that~~ the feeding pressure of the pre-thickener apparatus ~~is created by means of a pump~~.

9. (currently amended) A method according to claim 1, ~~characterized in that~~ further comprising controlling the thickening of the pulp by ~~is controlled with valves~~ regulating the flow of incoming pulp, filtrate and/or thickened ~~material~~ pulp with valves.

10. (currently amended) A method according to claim 1, ~~characterized in that~~ further comprising regulating the flow speed of the pulp in the pre-thickener apparatus ~~is regulated~~ by means of valves for the filtrate and/or the thickened ~~material~~ pulp.

11. (currently amended) A method according to claim 9, ~~characterized in that~~ further comprising regulating the consistency of the thickened pulp ~~is regulated to the a~~ desired value by changing a ~~the~~ flow amount ratio ~~of~~ between the thickened pulp and the filtrate.

12. (currently amended) A method according to claim 9, ~~characterized in that~~ further comprising regulating the consistency of the thickened pulp ~~is regulated to the a~~ desired value by changing a ~~the~~ flow amount ratio ~~of~~ between the low consistency pulp to be thickened and the filtrate.

13. (currently amended) A method according to claim 9, ~~characterized in that~~ ~~said regulation~~ wherein said step of controlling the thickening of the pulp is practiced ~~controlled~~ on the basis of the input power or input torque of said cleaning member.

14. (currently amended) A method according to claim 9, ~~characterized in that~~ ~~said regulation~~ wherein said step of controlling the thickening of the pulp is practiced by maintaining a constant pressure difference over the filter surface.

15. (currently amended) A method according to claim 9, ~~characterized in that~~
~~said regulation~~ wherein said step of controlling the thickening of the pulp is practiced
~~controlled~~ on the basis of an impulse from a previous or later process stage.

16. (currently amended) A method according to claim 9, ~~characterized in that~~
~~said regulation~~ wherein said step of controlling the thickening of the pulp is practiced
~~controlled~~ by changing the rotational speed of the cleaning member.

17. (currently amended) A method according to claim 1, ~~characterized in that~~
further comprising using said filtrate ~~is used~~ for dilution in a previous process stage.

18. (currently amended) A method according to claim 1, ~~characterized in that~~
further comprising using said filtrate ~~is used~~ for dilution in the same process stage.

19. (currently amended) A method according to claim 1, ~~characterized in that~~
further comprising separating fibers ~~are separated~~ from said filtrate by a fiber separating
means prior to reusing the filtrate.

20 - 25. (Canceled)